

COLLEGE **OF MEDICINE** PHOENIX

Introduction

- Collagenous gastritis is a rare condition characterized by chronic inflammation and collagen deposition in the gastric mucosa.
- It remains etiologically elusive, with highly variable clinical outcomes and no recognized therapeutic approach.
- We present a patient with advanced collagenous gastritis accompanied by collagenous colitis and celiac sprue with a dramatic clinical and histological response to therapy.

Case Report

- A 49-year-old previously healthy female presented with 3 weeks of diarrhea, abdominal cramping, and loss of appetite.
- Stool studies for common pathogens were negative and colonoscopy showed normal-appearing mucosa. Random biopsies, however, revealed collagenous colitis and the patient was prescribed bismuth subsalicylate.
- Due to lack of response, she was switched to budesonide delayed release capsules, which also failed to improve symptoms.
- Esophagogastroduodenoscopy (EGD) was performed following new-onset weight loss and depression, revealing white plaques in the gastric antrum (Figure 1A) and biopsy showed marked collagen deposition consistent with collagenous gastritis (Figure 1B).

Collagenous Gastritis Treated with Open Capsule Budesonide

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Figure 1. (A) White plaques in the gastric antrum. (B) Biopsy of stomach with trichrome stain showing marked collagen deposition consistent with collagenous gastritis.

- Duodenal biopsies incidentally showed villous blunting and intra-epithelial IgA antibody levels (139.6 U/mL) corroborated the impression of celiac sprue.
- Following 2 months on a gluten-free diet and budesonide, her symptoms resolved. She remained asymptomatic 1 year later.
- To assess mucosal healing, she underwent a repeat EGD and flexible sigmoidoscopy, showing histological normalization of the duodenal and colonic mucosa.
- However, persistent collagen deposition was noted in the stomach and she was thus restarted on budesonide with instructions to take the medication sprinkled in apple sauce (open capsule budesonide).
- An EGD 3 months later revealed interval improvement in the degree of gastric mucosal collagen but persistence of lymphocytic inflammation (Figure 2).



lymphocytosis with a sprue-like pattern. Increased tissue transglutaminase



Figure 2. Interval improvement in the degree of gastric mucosal collagen but persistence of lymphocytic inflammation after open capsule budesonide treatment.

Arnason et al., Modern Pathology (2015). PMID: 25234289. Choung et al., Clinical Gastroenterology and Hepatology (2021). PMID: 34864160. Genta et al., Digestive and Liver Disease (2021). PMID: 33824091.



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Discussion

• Collagenous gastritis is a rare disorder characterized by various patterns of collagen deposition in the gastric wall.

Clinical symptoms may include abdominal pain, anemia, weight loss, diarrhea, nausea and vomiting, among others.

• A number of therapeutic agents have been utilized but there is no standardized therapy.

• This case illustrates clinical and histological improvement in a patient with collagenous gastritis treated with open capsule budesonide administration.

References